

LIEUTENANT COLONEL W.P.BURNHAM

INPANTRY, UNITED STATES ARMY

ACTING COMMANDANT

THE ARMY SERVICE SCHOOLS

FORT LEAVENWORTH, KANSAS

> PRESS OF ARMY SERVICE SCHOOLS

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ANNUAL REPORT

OF

LIEUTENANT COLONEL W. P.BURNHAM

INFANTRY, UNITED STATES ARMY

ACTING COMMANDANT

THE ARMY SERVICE SCHOOLS

FORT LEAVENWORTH, KANSAS

1913



PRESS OF
ARMY SERVICE SCHOOLS

THE ARMY SERVICE SCHOOLS FORT LEAVENWORTH, KANSAS

August 31, 1913.

From: Acting Commandant, Army Service Schools.

To: The Adjutant General, U. S. Army.

Subject: Annual Report for year ending August 31, 1913.

The following report of the operations and administration of the Army Service Schools for the school year ending August 15, 1913, is submitted. In compliance with instructions contained in paragraph 24, Special Orders No. 195, War Department, August 19, 1912, I reported at these schools on September 4, 1912, and being the senior line officer on duty at the schools, assumed the duties of assistant commandant, and director Army School of the Line and Army Staff College, relieving Major Farrand Sayre, Cavalry, Senior Instructor, Department of Military Art, of those duties.

The Commandant, Brigadier General R. D. Potts, U. S. Army, being at the time on detached service, the duties of acting commandant also devolved upon me, which duties I am still performing. Upon assuming my duties I found the following named officers on duty as directors or instructors in the different departments, viz:

DEPARTMENT OF MILITARY ART

Senior Instructor

Major Farrand Sayre, Cavalry

Instructors

Major G. D. Moore, 18th Infantry Captain R. H. McMaster, 5th Field Artillery Captain H. B. Fiske, 28th Infantry
Captain C. E. Stodter, 9th Cavalry
Captain Berkeley Enochs, 19th Infantry
Captain A. L. Conger, 29th Infantry
Captain C. A. Trott, 5th Infantry
Captain Laurence Halstead, 6th Infantry
Captain T. B. Taylor, 3d Cavalry
Veterinarian G. E. Griffin, 3d Field Artillery

DEPARTMENT OF LAW

Senior Instructor

Lieut.-Colonel J. B. Porter, J. A. G. Department

Instructor

Captain Edward Sigerfoos, 5th Infantry

DEPARTMENT OF LANGUAGES

Senior Instructor

Captain William Kelly, jr., 9th Cavalry

Instructors

Captain C. F. Martin, 3d Cavalry Captain Rhees Jackson, 12th Infantry First Lieutenant Henry Hossfeld, 3d Infantry

THE ARMY FIELD SERVICE AND CORRESPONDENCE SCHOOL FOR MEDICAL OFFICERS

Director

Major W. N. Bispham, Medical Corps
THE ARMY SIGNAL SCHOOL

Instructors

Captain Parker Hitt, Signal Corps First Lieutenant J. O. Mauborgne, 3d Infantry

FIELD ENGINEER SCHOOL AND DEPARTMENT OF ENGINEERING

Director

Major M. L. Walker, Corps of Engineers

Instructors

Captain G. R. Spalding, Corps of Engineers Captain Douglas McArthur, Corps of Engineers First Lieutenant R. E. Beebe, 14th Infantry

LIBRARIAN

Lieut. Colonel E. B. Fuller, U. S. Army, retired

INSTRUCTOR IN EQUITATION

First Lieutenant Eben Swift, jr., 11th Cavalry

SECRETARY AND DISBURSING OFFICER

First Lieutenant D. W. Strong, 7th Infantry, performed the duties of secretary and disbursing officer until August 9, 1913, when, because of the detached service law he was relieved per paragraph 26, Special Orders No. 184, War Department, August 8, 1913.

Because of the detached service law, which became effective December 15, 1912, the following named officers were relieved and joined their organizations, viz:

Captain H. B. Fiske, 28th Infantry
Captain C. E. Stodter, 9th Cavalry
Captain A. L. Conger, 29th Infantry
Captain O. A. Trott, 5th Infantry
Captain Laurence Halstead, 6th Infantry
Captain T. B. Taylor, 3d Cavalry
Captain William Kelly jr., 9th Cavalry
Captain Charles F. Martin, 3d Cavalry
Captain Edward Sigerfoos, 5th Infantry
First Lieutenant Henry Hossfeld, 3d Infantry
First Lieutenant J. O. Mauborgne, 3d Infantry
First Lieutenant R. E. Beebe, 14th Infantry
First Lieutenant Eben Swift, jr., 11th Cavalry

Captain R. H. McMaster, 5th Field Artillery, was relieved at his own request per Special Orders No. 284, War Department, December 4, 1912, and left schools December 11, 1912.

Captain Berkeley Enochs, 19th Infantry, was detailed to the General Staff Corps and left March 13, 1913.

Captain Douglas MacArthur, Corps of Engineers, was relieved per Special Orders No. 261, War Department, series 1912, and left schools November 14, 1912.

It will be noted that, of the instructors, Depart-

ment of Military Art, eight (8) were relieved on or about December 15, 1912, leaving that department in a badly crippled condition. Only the senior instructor and three (3) instructors, (Majors Moore, Smith and Bishop) were left to carry out the program of instruction. The War Department took immediate steps to alleviate conditions and, in orders directed the following named officers to report for duty, who, upon arrival were assigned to the Department of Military Art, viz:

Major N. F. McClure, 5th Cavalry Captain W. K. Naylor, 9th Infantry Captain E. E. Haskell, Infantry

Captain Max C. Tyler, Corps of Engineers, reported for duty, under War Department orders, on April 15, 1913, as instructor, Department of Engineering.

In the Department of Law, the vacancy created by the relief of Captain Edward Sigerfoos, 5th Infantry, has not been filled.

In the Department of Languages, 2d Lieutenant Thom Catron, 23d Infantry, upon reporting for duty, under War Department orders, on September 23, 1912, was assigned to duty in that department.

In the Army Signal School, which began the course without a director, Major L. D. Wildman, Signal Corps, upon reporting for duty under War Department orders, on January 23, 1913, was assigned to duty as director and 2d Lieutenant E. R. Andrews, 17th Infantry, as instructor.

This upheaval in the teaching force was at times very perplexing and discouraging. The changes occurred mostly in the Departments of Military Art and Languages, and will be found very fully commented on in the reports of the senior instructors of those departments. Every reasonable effort was

made to obtain instructors and to lighten the work of the few who remained. The situation was made plain to higher authority, and although at times it looked as if our troubles were not duly appreciated, I am convinced that we fared as well as the exigencies of the service permitted.

I believe the high standard of instruction of past years was maintained in all the schools. The Department of Languages was more or less crippled during the last six months of the year, it being impossible for two instructors to accomplish as much as four.

The prospects for the coming year are more encouraging, as the staff of instructors has been rehabilitated, and all schools and departments will start with almost a full complement of teachers. The loss of Major Sayre, Senior Instructor, Department of Military Art, will be sorely felt, and I take this occasion to testify to his superior efficiency as an instructor, and to the able manner in which he handled, under adverse and discouraging conditions, the very important Department of Military Art. This department will start next year with an entirely new force of instructors, not a single officer being left who was here when I assumed the duties of acting commandant last September.

The course and methods of instruction in the various schools and departments were practically the same as during last year. For detailed information regarding the same, reference should be made to the reports of directors and heads of departments hereto attached.

THE ARMY STAFF COLLEGE

The Army Staff College class commenced the course on September 1, 1912, with twenty-four (24) members, as follows:

Major R. L. Bush, 26th Infantry Major J. J. Bradley, 30th Infantry Captain H. B. Black, 24th Infantry Captain C. T. Boyd, 10th Cavalry Captain D. F. Craig, 4th Field Artillery Captain H. A. Eaton, 23d Infantry Captain C. S. Fries, 27th Infantry Captain J. B. Gowen, 10th Infantry Captain A. J. Greer, 16th Infantry Captain J. G. Hannah, 18th Infantry Captain P. T. Hayne, jr., 12th Cavalry Captain W. A. Kent, 4th Infantry Captain J. G. Langdon, 4th Field Artillery Captain C. R. Lloyd, 6th Field Artillery Captain F. L. Morrow, 27th Infantry Captain W. H. McCornack, 10th Cavalry Captain J. W. Furlong, 6th Cavalry Captain C. D. Roberts, 7th Infantry Captain W. G. Sills, 1st Cavalry Captain H. A. Smith, 3d Infantry Captain M. C. Smith, 14th Cavalry Captain J. E. Stephens, 2d Field Artillery Captain W. C. Sweeney, 21st Infantry Captain Kirby Walker, 14th Cavalry

Because of the operation of the detached service law, the following named officers were relieved from duty on December 15, 1912, and ordered to proceed to join their organizations, viz:

Captain C. T. Boyd, 10th Cavalry
Captain D. F. Craig, 4th Field Artillery
Captain H. A. Eaton, 23d Infantry
Captain C. S. Fries, 27th Infantry
Captain J. B. Gowen, 10th Infantry
Captain F. J. Morrow, 27th Infantry
Captain Kirby Walker, 14th Cavalry

Captain J. W. Furlong, 6th Cavalry, was relieved from duty at schools per paragraph 15, Special Orders No. 223, War Department, series 1912, and left schools October 15, 1912.

Captain A. J. Greer, 16th Infantry, was relieved from duty at schools per paragraph 15, Special Orders No. 223, War Department, series 1912, and left schools November 2, 1912.

Captain H. B. Black, 24th Infantry, was relieved from duty at schools per paragraph 15, Special Orders No. 223, War Department, series of 1912, and left schools November 14, 1912.

Captain C. R. Lloyd, 6th Field Artillery, was relieved from duty at schools, effective May 6, 1913, per paragraph 2, Special Orders No. 81, War Department, April 8, 1913.

Captain M. C. Smith, 14th Cavalry, was relieved from duty at schools, effective May 27, 1913, per paragraph 3, Special Orders No. 107, War Department, dated May 8, 1913.

The following officers were graduated on June 16, 1913, viz:

Major R. L. Bush, 26th Infantry
Major J. J. Bradley, 30th Infantry
Captain J. G. Hannah, 18th Infantry
Captain P. T. Hayne, jr., 12th Cavalry
Captain W. A. Kent, 4th Infantry
Captain J. G. Langdon, 4th Field Artillery
Captain C. R. Lloyd, 6th Field Artillery
Captain W. H. McCornack, 10th Cavalry
Captain C. D. Roberts, 7th Infantry
Captain W. G. Sills, 1st Cavalry
Captain H. A. Smith, 3d Infantry
Captain M. C. Smith, 14th Cavalry
Captain J. E. Stephens, 2d Field Artillery
Captain W. C. Sweeney, 21st Infantry

THE ARMY SCHOOL OF THE LINE

The following named officers constituted the Line Class at the beginning of the school year:

Captain W. H. Armstrong, Porto Rico Infantry Captain T. M. Anderson, 7th Infantry Captain W. C. Babcock, 13th Cavalry Captain W. E. Bennett, 25th Infantry Captain W. S. Bowen, Coast Artillery Corps Captain Preston Brown, 17th Infantry Captain W. S. Browning, 6th Field Artillery Captain W. A. Carleton, 30th Infantry Captain F. L. Case, 4th Cavalry Captain A. G. Clarke, Coast Artillery Corps Captain C. W. Cole, 15th Cavalry Captain C. M. Condon, Coast Artillery Corps Captain W. D. Davis, 5th Infantry Captain R. J. Fleming, 10th Cavalry Captain R. C. Foy, 1st Cavalry Captain J. De Camp Hall, 4th Infantry Captain E. S. Hartshorn, 14th Infantry Captain W. C. Johnson, 18th Infantry Captain E. L. King, 2d Cavalry Captain F. W. Lewis, 29th Infantry Captain F. H. Lincoln, Coast Artillery Corps Captain W. J. Lutz, 28th Infantry Major O. B. Meyer, 14th Cavalry Captain E. A. Myer, 11th Infantry Captain J. M. Morgan, 12th Cavalry Captain R. I. Rees, 3d Infantry Captain C. A. Romeyn, 2d Cavalry Captain E. S. Sayer, jr., 21st Infantry Captain W. B. Scales, 5th Cavalry Captain A. A. Starbird, 5th Field Artillery Captain William Taylor, 10th Infantry Captain Herschel Tupes, 1st Infantry Captain I. C. Welborn, 9th Infantry Captain Robert Whitfield, 22d Infantry Captain J. S. Turrill, U. S. Marine Corps Captain A. S. Williams, U. S. Marine Corps

Because of the detached service law the officers hereinafter named were relieved from duty at schools, effective December 15, 1912, viz:

Captain W. H. Armstrong, Porto Rico Infantry Captain W. A. Carleton, 30th Infantry Captain W. D. Davis, 5th Infantry Captain R. J. Fleming, 10th Cavalry Captain R. C. Foy, 1st Cavalry Captain F. W. Lewis, 29th Infantry Captain F. A. Lincoln, Coast Artillery Corps Captain W. J. Lutz, 28th Infantry Captain J. M. Morgan, 12th Cavalry Captain E. A. Myer, 11th Infantry was relieved from duty at schools per paragraph 20, Special Orders No. 275, War Department, November 22, 1912, and left schools December 3, 1912.

Captain I. C. Welborn, 9th Infantry, was relieved from duty at schools per paragraph 20, Special Orders No. 275, War Department, November 22, 1912, and left schools December 9, 1912.

Captain Herschel Tupes, 1st Infantry, was relieved from duty at schools per paragraph 2, Special Orders No. 24, War Department, January 29, 1912, and left schools February 14, 1913.

The remaining officers completed the course and were graduated June 16, 1913, as follows:

Honor Graduates

Captain W. C. Johnson, 18th Infantry Captain Preston Brown, 17th Infantry Captain W. S. Browning, 6th Field Artillery Captain A. A. Starbird, 5th Field Artillery Captain E. S. Hartshorn, 14th Infantry

$Distinguished\ Graduates$

Captain W. C. Babcock, 13th Cavalry Captain W. S. Bowen, Coast Artillery Corps

Captain F. L. Case, 3d Cavalry

Captain A. G. Clarke, Coast Artillery Corps

Captain C. M. Condon, Coast Artillery Corps

Captain J. De Camp Hall, 4th Infantry

Captain E. L. King, 2d Cavalry

Captain R. I. Rees, 3d Infantry

Captain C. A. Romeyn, 2d Cavalry

Captain W. B. Scales, 5th Cavalry

Captain William Taylor, 10th Infantry

Captain Robert Whitfield, 22d Infantry

Graduates

Captain T. M. Anderson, 7th Infantry Captain W. E. Bennett, Infantry Captain C. W. Cole, 15th Cavalry Major O. B. Meyer, 14th Cavalry

Captain E. S. Sayer, jr., 21st Infantry

Captains J. S. Turrill and A. S. Williams, U. S. Marine Corps, were graduated and given diplomas.

THE ARMY SIGNAL SCHOOL

The following named officers constituted the Signal School Class, all of whom graduated except 1st Lieutenant Jaime Nadal, Porto Rico Infantry, who was relieved from duty at school per paragraph 20, Special Orders No. 275, War Department, November 22, 1912, and left schools December 15, 1912, viz:

1st Lieutenant F. F. Black, 11th Infantry
1st Lieutenant V. W. Boller, 2d Infantry
1st Lieutenant W. A. Capron, 6th Field Artillery
1st Lieutenant C. A. Dougherty, Signal Corps
1st Lieutenant M. E. Malloy, 29th Infantry
1st Lieutenant Jaime Nadal, Porto Rico Infantry
1st Lieutenant F. E. Overholser, 5th Infantry
1st Lieutenant J. H. Van Horn, 11th Infantry
1st Lieutenant G. F. Waugh, 27th Infantry

THE ARMY FIELD ENGINEER SCHOOL

The following named officers constituted the Army Field Engineer Class, pursued the course satisfactorily and were graduated June 16, 1913, viz:

Major M. J. McDonough, Corps of Engineers Captain P. S. Bond, Corps of Engineers

SPECIAL CLASS FOR FIELD OFFICERS

Besides the above named regular classes there was also detailed a special class of field officers who took a course in tactics, especially prepared for them, beginning January 13, 1913, and terminating March 19, 1913.

This class was composed of the following named officers, viz:

Colonel Abner Pickering, Infantry Lieut. Colonel G. H. Morgan, 11th Cavalry Lieut. Colonel D. C. Shanks, 9th Infantry Lieut. Colonel C. W. Kennedy, 16th Infantry Lieut. Colonel H. D. Styer, 17th Infantry Major D. L. Tate, 3d Cavalry Major C. A. F. Flagler, Corps of Engineers
Major A. P. Buffington, 21st Infantry
Major G. H. Cameron, 14th Cavalry
Major W. S. Guignard, 6th Field Artillery
Major Edward Anderson, 12th Cavalry
Major E. M. Lewis, 19th Infantry
Major William Weigel, 23d Infantry
Major G. W. Read, 9th Cavalry
Major C. B. Hagadorn, 23d Infantry
Captain C. W. Otwell, Corps of Engineers
Lieut. Colonel B. H. Fuller, U. S. Marine Corps
Major C. G. Andresen, U. S. Marine Corps

All of the members of the class completed the course, except Major Tate, who was duly relieved by War Department orders and left the schools February 22, 1913. No diplomas or certificates were given these officers. Special report on the work accomplished was forwarded to the War Department, March 20, 1913, as required by paragraph 70, General Orders No. 128, War Department, series of 1911.

THE ARMY FIELD SERVICE SCHOOL FOR MEDICAL OFFICERS

The course of instruction in this school in former years covered a period of six (6) weeks. This year's course covered a period of eight (8) weeks, the War Department having approved the extension of time in endorsement dated Adjutant General's Office, November 19, 1912. The course commenced April 1, 1913, and terminated May 22, 1913.

The following named officers of the army and organized militia composed the class, viz:

Major Henry Page, Medical Corps
Major E. R. Schreiner, Medical Corps
Major W. W. Reno, Medical Corps
Major H. D. Bloombergh, Medical Corps
Major J. R. Shook, Medical Corps
Major H. T. Lay, National Guard, Alabama
Major S. A. Milliken, National Guard, New Mexico

Captain F. A. Pittenger, National Guard, Idaho Captain J. E. Merrill, National Guard, Minnesota Captain J. F. Sharp, National Guard, Utah Captain J. W. Frew, National Guard, Wisconsin

All of the above named officers completed the course and were given certificates.

CORRESPONDENCE COURSE FOR MEDICAL OFFICERS

The following named medical officers of the regular army took the correspondence course for medical officers, viz:

Major W. H. Wilson, Medical Corps Major T. J. Kirkpatrick, Medical Corps Major Henry Page, Medical Corps Major B. K. Ashford, Medical Corps Major W. P. Chamberlain, Medical Corps Major A. E. Truby, Medical Corps Major J. H. Ford, Medical Corps Major L. T. Hess, Medical Corps Major C. C. Collins, Medical Corps Major B. J. Edger, jr., Medical Corps Major S. M. Waterhouse, Medical Corps Major E. H. Hartnett, Medical Corps Major C. E. Marrow, Medical Corps Major M. A. W. Shockley, Medical Corps Major S. H. Wadhams, Medical Corps Major C. P. Robbins, Medical Corps Major E. F. Geddings, Medical Corps Major A. W. Morse, Medical Corps Major F. C. Baker, Medical Corps Major C. R. Reynolds, Medical Corps Major F. A. Dale, Medical Corps Major J. R. Shook, Medical Corps Major F. T. Woodbury, Medical Corps Major H. H. Rutherford, Medical Corps Major W. W. Reno, Medical Corps Major H. D. Bloombergh, Medical Corps

REMARKS AND RECOMMENDATIONS

Marking System-With the concurrence of the majority of the academic board, upon assuming the

duties of acting commandant, I made rather a radical change in the system of giving out the marks in the Line Class. Various methods have been tried in past years, and none have proved to have been entirely satisfactory. The competition for marks has always been great in that class, and the publication of the marks from time to time has not been found to be beneficial in all ways. There is little or no danger of competition not being sufficiently sharp to answer all purposes. The system in force at the time of my arrival was to furnish every officer his own marks confidentially, "and he was requested, not ordered, to so consider them." The desired result was not accomplished, the marks of all soon leaked out and the standing of each officer was known almost continuously. By the system in force during the present year no marks were published, and no student or instructor knew the standing of any member of the class until the close of the year. The marks are confidential, and as the papers are marked by number and not by name, instructors do not know the name of the writer of the paper they The comments on the document when are marking. returned to him show the writer the general character of his work. This method of handling the marks, being regarded as an improvement, will. with slight modifications, be continued next year. The perfect harmony that existed throughout the schools during the year I attribute largely to this system of not publishing the marks. Every instructor, and with one or two exceptions it is believed that every student officer, gave the best that was in him.

Absence of Troops from Garrison—Due to the absence of all troops from the post except a squadron of cavalry, which, on account of increased post work, could not be utilized, all of the scheduled spring and

summer maneuvers with troops had to be omitted, and as the time could not well be used otherwise, with the approval of the War Department the schedules were changed and the schools were closed June 16, instead of June 30.

Field Company A, Signal Corps, arrived from Fort Omaha by marching about May 20, and remained until July 7, so that the practical work of the Signal School with a field company was not materially hampered or shortened. If Field Company D, Signal Corps, is not to return here by September 1, special request will be made for another company to take its place, as such an organization is needed here, especially in the fall and spring.

No material changes in the courses or methods of instruction are recommended for next year.

Detail of First Lieutenants to Classes of 1913-14-Anticipating that in consequence of the detached service law it might be difficult to obtain the usual number of captains for the Line Class, the Academic Board recommended in due time that rather than reduce the Line Class below forty members, first lieutenants of more than ten years' commissioned service be regarded as eligible for the next Line Class, provided they possessed the other required qualifications. This recommendation was approved and fifteen first lieutenants have been designated. This should be regarded as an exceptional move, as it is believed that the time is not yet ripe to allow officers below the grade of captain to take the course. There is to be one major in the next Line Class and it is not thought to be good policy to bring field officers into direct competition with lieutenants. For the present the Line Class, in my opinion, should be composed of captains only. For a similar reason it was recommended that second lieutenants with

over five years' commissioned service be allowed in the Signal School for next year. This should not take place, provided there are enough first lieutenants eligible and available.

Change in School Year—The War Department approved the recommendation of the Academic Board that in future the school year begin September 5, instead of September 1, as heretofore. This is believed to be a good change on account of the excessive heat in this region during the latter part of August and the early days of September. A still later date of opening was considered, but in view of the practical out door work scheduled for the fall months, it was believed that the time could not be spared, as it could not be made up by closing the schools later than June 30—as the weather is equally depressing at that period of the summer.

Special Class of Field Officers—With an untried and much reduced force of instructors in the Department of Military Art, it was with considerable difficulty that the special course of instruction in tactics for field officers was carried to a successful conclusion. This course was designed for the benefit of the older field officers who have never had an opportunity to pursue the work of The Army School of the Line. No officer with less than twenty years' commissioned service should be allowed to take this course. idea that it is a short and easy way to reach the War College should be strongly discouraged. Such classes bring our senior officers into closer touch with the service schools, and give them a more extended and better knowledge of the work and object of the The advice and comments of practical schools. officers of long experience should help the institution.

Formulating questions and marking examination papers—The School Staff was called on during the year to prepare several sets of examination ques-

tions for enlisted and civilian candidates for appointment to the grade of second lieutenant in the mobile The examination papers themselves were then sent here to be marked. At one time during the winter over a hundred sets of papers came in for marking, when on account of the shortage and changing of instructors, and the arrival of a special class of field officers, for instruction, the teaching force was taxed to the limit. The handling of these examinations is hard and exacting work, and must be done by men already fully occupied with regular school duties. It is believed that these examinations can be greatly simplified. A special report on the subject, together with a tentative order was forwarded to your office May 26th, and the early adoption of the same is urged. It is believed that the modified orders will make for simplicity, efficiency and economy. The examination for enlisted men and civilians covers practically the same ground, and if the examinations of both classes of candidates be held at the same time, there is no reason why the same examination questions should not answer for both This would avoid the preparation of a number of different sets of questions each year. For example the examination this summer for civilians commenced July 14, and the enlisted candidates August 1 (two weeks later), thus necessitating the prepation of two sets of questions. The task of marking the corresponding papers would also be easier.

Library—Next to additional officers quarters the the most urgent need of the institution is a new library building. The construction of such a separate building has been commented upon in the annual reports of the commandants for the past five years. It was recommended by the inspector general in his last report and a special report on the same was forwarded to your office June 3, 1913.

Equitation and Hippology-The new heating

plant has been installed in the riding hall, so that no difficulty resulted from the cold. The course in equitation has proved itself to be sufficiently valuable to make it compulsory for all first year students. Lieutenant Eben Swift, 11th Cavalry, was the instructor until his relief December 15, by operation of the detached service law. Captain W. G. Sills, 1st Cavalry, of the Staff Class, assisted by Captain C. W. Cole. 15th Cavalry, of the Line Class took Lieutenant Swift's place, until the arrival of Lieutenant H. E. Mann, 12th Cavalry, in March, when the last named officer took over the duty of both of these The course of instruction is based upon that of the Mounted Service School, modified necessarily to suit the conditions here. Besides giving the officers the daily physical exercise required by War Department orders, the aim is to instruct them in the training of an officer's mount and to try in the limited time devoted to this work, to give each officer a good seat, good hands, and to teach him to jump with ease the ordinary obstacles met with in the officers Russian ride course. The regular course in equitation is supplemented by a thorough and very interesting course of lectures on hippology by the School Veterinarian, Dr. G. E. Griffin, 3d Field Artillery, which include talks on the methods of determining the ages of horses, diseases, conformation, stable management, care of animals, methods of remount depots, etc.

Conclusion—The most cordial relations have existed between the post and the schools. Harmony, co-operation and an absence of friction has been evident throughout the institution. It is a pleasure to testify to the cheerful and efficient manner in which all instructors and student officers have performed their various duties. I am glad also of the opportunity to commend the services of the personnel of the

civil service in the various departments, and of the two enlisted detachments. They have done much hard work, in a zealous and competent manner, and their continued services are essential to the efficiency of the schools.

> W. P. Burnham, Lieutenant-Colonel, Infantry, Acting Commandant.

THE ARMY SERVICE SCHOOLS FORT LEAVENWORTH, KANSAS

July 30, 1913.

The Secretary and Disbursing Officer, From:

Army Šervice Schools.

The Secretary, Army Service Schools. To:

Subject: Annual Report.

1. I submit the following report pertaining to the office of the Secretary and Disbursing Officer for the fiscal year ending June 30, 1913:

During the period July 1, 1912, to June 30, 1913. the sum of \$15,000.00 was allotted for the support of the Army Service Schools and expended as follows:

> Furniture and stationery, office and library, apparatus and supplies, Department of Engineering, Drafting Room and Map Making Department_____\$ 8,277.88 The Library, (Books and periodicals) 2,125.88 Book-Bindery 1,191.06 Printing Office 1,776,17 Army Signal School 1,267.26 Rental of Telephones 265.60 Transportation of persons_____ 96.15

> > \$15,000.00

- The civil service detachment personnel of employees under my direction have all rendered most arduous and satisfactory service throughout the year. Each man seemingly made the interests of the schools his own special interest, with splendid results for promptness and efficiency in the dispatch of busi-Such service is deserving of at least the slight reward of words of commendation where more commensurate reward can not now be made.
 - 3. Over eighteen hundred (1800) officers of the 23

regular army and five hundred officers of the organized militia are now carried on the mailing list. These officers, besides others not on the mailing list, have secured many military books and maps, by both American and foreign authors, through the secretary's office.

4. The chief clerk's office, the book department, book bindery, printing office, lithographic and mapmaking offices, college detachment, and college mess have met every demand made upon them in the business spirit of prompt and efficient service.

D. W. STRONG,
1st Lieutenant, 7th Infantry.

THE ARMY SERVICE SCHOOLS FORT LEAVENWORTH, KANSAS

July 1, 1913.

From: The Librarian, Army Service Schools.
To: The Acting Commandant, Army Service

Schools.

Subject: Annual Report.

1. The number of books in the library on June 30th, 1913 was 26,199, which are accounted for as follows:

On hand June 30, 1912

On hand June 30, 1912	24	1,974
Accessions:		
Public documents and school publications 175	į	
General staff translations 33	}	
From bindery (service periodicals) 266	j	
By purchase 855	j	
By donation 88	. 1	1,417
Total	26	3,391
Dropped (obsolete manuals) 26	3	
Transferred to chief of engineers 166	3	192
On hand June 30, 1913	26	3,199
Donations:		
Lieut. F. G. Best, Wisconsin National Guard	10	vols.
Mr. T. C. Carey, Philadelphia	2	"
Kansas State Board of Agriculture	4	66
Kansas State Historical Society	1	"
Lieut. M. E. Malloy, U. S. Army	1	66
Colonel H. O. Perley, U. S. Army	15	"
General R. D. Potts, U. S. Army	1	"
Major Farrand Sayre, U. S. Army	24	"
Hon. William Sulzer, Governor, State of New York	24	"
U. S. Cavalry Association	. 5	"
General A. A. Woodhull, U. S. Army	, 1	"
Total	88	"
Total number of books loaned out during year		1,739

The unusually small number of books, over onehalf less than for the preceding year, loaned out is accounted for partly because of the fact that the garrison of Fort Leavenworth has been away for a large part of the year, and partly on account of the small size of the classes. However, the number of books loaned out during the year is no criterion by which to judge of the use made of the library by the instructors and student officers for whom it is primarily intended. Instructors taking a book usually retain it during the entire year and student officers in pursuing their research work seldom take books from the library but use them in the study rooms where they remain on the tables as long as reauired.

There has been no change in the library assistants during the year and both of these have performed their work with their usual ability and faithfulness. The work of Master Signal Electrician Harry Bell has been unusually invaluable and it is to be regretted that, although he holds the highest non-commissioned rank in the army, his services can not be more suitably rewarded.

It would seem to be hardly necessary to again, for the seventh time in an annual report, invite attention to the ever-growing necessity for a new library building. However, we now have other reasons, in addition to those heretofore set forth, why the construction of this much-needed building should be no longer delayed. First, the addition of gasoline dynamos to the signal laboratory equipment, which laboratory is located immediately under the library, adds to the danger from fire and also the noise made by them when running does away with the quietness that usually pervades and should be the characteristic of a library. Second, a radio station has been established next to the study rooms and this, when in

operation, makes it impossible to use these rooms with any degree of comfort. The other reasons which have been so often repeated in the annual reports are the lack of room for the increasing number of books and the lack of protection from fire in a building which is the reverse of being fire-proof.

EZRA B. FULLER,
Lieutenant Colonel, U. S. Army, retired.

THE ARMY FIELD ENGINEER SCHOOL FORT LEAVENWORTH, KANSAS

June 30, 1913.

From: Director, Army Field Engineer School.

To: Secretary, Army Service Schools.

Subject: Annual Report.

- 1. The purpose of the Army Field Engineer School, as set forth in paragraph 47, General Orders No. 128, War Department, 1911, is two-fold:
- (a) The instruction of officers of the Corps of Engineers, and of engineer officers of the Organized Militia, in their military duties.
- (b) To furnish such instruction in Military Engineering as the schedules of the other schools comprising The Army Service Schools may call for.
- 2. The course of study for engineer officers has been successfully completed, during the term just closed, by two students from the Corps of Engineers. No change has been made in the curriculum given in the last annual report, with the exception that greater prominence has been assigned the subject of battle-field fortifications, a correct conception concerning which is believed to be most essential to thorough efficiency on the part of military engineers. Owing to the excellent tactical instruction imparted to engineer officers during the course in Military Art in The School of the Line, the period of attendance at this school is eminently suited to the inculcation of sound ideas concerning battlefield fortifications in the minds of the students.
- 3. Since the organization of this school three classes have passed through, with a total combined attendance of five officers of the Corps of Engineers.

The new class just detailed for 1913-14 consists of two officers. It is to be regretted that greater advantage is not taken of the facilities here afforded for the extension of the military education of engineer officers. The plant is fully able to handle a class of ten officers,—the maximum authorized by existing War Department orders,—and any reduction in this number necessarily leads to a sacrifice of economic efficiency.

4. The course of instruction in military engineering for The Army School of the Line comprised 114 half days, devoted to military sketching and surveying, and to field fortifications. The object sought in the handling of the first named subject is development on the part of every officer of a thorough comprehension of the relation between maps and the ground forms that they represent, in order that he may make intelligent and ready use of the former.

Incidental to this instruction, ability to make military sketches is acquired by all students in prcportion to their natural adaptability for such work, great skill being acquired by a considerable percentage of each class. The course in field fortifications has been further developed along the lines inaugurated two years ago, the wisdom of the change in the method of handling this subject having received further demonstration in the enthusiasm with which officers pursue the course owing to a realization on their part of the personal benefit derived therefrom. No radical change is contemplated in the near future. but only such minor variations from present and past practices as will keep the instruction imparted abreast of military progress.

5. The course in military engineering for the Staff College comprised 61 half days, devoted to military sketching, reconnaissance, and field fortifications, the subjects being handled along more ad-

vanced lines than in the Line Class course. The Staff Class was used, as is customary during the early portion of the term, to assist in the topographical instruction of the Line Class. All work assigned the Staff Class is of a practical nature, consisting of problems the solutions of which,—made usually in the field—are designed to prepare officers for the satisfactory discharge of general staff duties in the field during actual operations. In addition ten lectures, devoted to field fortifications and kindred subjects, were delivered before the class.

- 6. A course of instruction in map reading, study of ground forms, and military sketching, covering twenty half days, was given the class of The Army Signal School. All work was practical and resulted in developing on the part of students possessing adaptability for such work sufficient skill in military sketching to warrant their being considered qualified for the performance of this duty.
- 7. In the Special Class for Field Officers, conducted during the year at The Army Service Schools, four half days are devoted to map reading, the instruction being given by instructors from the Field Engineer School.
- 8. A course in map reading and the elements of military sketching, covering twelve half days, is given the officers attending The Army Field Service School for Medical Officers.
- 9. In addition to instructional duty, the director of The Army Field Engineer School is charged with general supervision over the drafting, photographic, lithographic, and instrument plants and personnel connected with The Army Service Schools. From rather small beginnings, the facilities here have been gradually developed until now practically any reproduction of line work can be successfully accomplished. During the past year mercury are

lights and an enlarging camera have been added to the photographic equipment, materially benefitting the quality and quantity of work that can be turned out. No other addition has been made to plant, but all equipment has been maintained in first class condition. While originally installed to meet merely the needs of the Service Schools, much work is now done for the army at large and for the militia. As conveying some idea of the operation of the plant, the following summary is submitted:

DRAFTING ROOM

Drawing and tracings,	various	;=====================================	138
Blue and brown prints	, various		7,140

The remaining 49 sheets of the Leavenworth War Game Map were completed, involving the collection of field data and its transfer to enlargements of the geological survey map, tracing the resulting sheets, and making prints for lithographic reproductions.

Considerable additions to the Gettysburg War Game Map were completed, all data on hand being worked up.

An enlargement to war game size was made of the 2" map of the Chickamauga Maneuver Grounds at the request of the Commanding Officer, Fort Oglethorpe, Ga., the resulting map being in 9 sheets, each 27"x38".

PHOTOGRAPHIC ROOM

Wet plates, various	450
Dry plates, various	390
Lantern slides	500
Prints, up to 8"x10"	2,100
Bromide enlargement of maps	90
LITHOGRAPHIC ROOM	
War game sheets, black impressions	22,510
War Game sheets, blue impressions	29,800
Cuts for Army Signal School, black impressions	1,818
General work for service schools, black impressions	12,894
General work for service schools, blue impressions	4,849
Brass War Game scales etched	240
INSTRUMENT ROOM	

1.300

Wooden Alidade scales

Brass War Game scales	250
Sketching boards for Service Schools	50
Sketching boards for book department	20

In addition the entire instrumental equipment used in the topographical work of the schools has been kept in repair.

10. Lieut. Colonel Joseph E. Kuhn, Corps of Engineers, was relieved from duty as director of The Army Field Engineer School on August 5, 1912, and the undersigned succeeded to the position. During the year 1st Lieutenant R. E. Beebe, Infantry, was relieved from duty as instructor and Captain M. C. Tyler, Corps of Engineers was detailed. It is a pleasure to the director to put on record his appreciation of the faithful and loyal support of the officers and enlisted men connected with the Army Field Engineer School during the past year, any success attained being largely due to their efforts.

M. L. WALKER,
Major, Corps of Engineers.

ARMY SCHOOL OF THE LINE AND ARMY STAFF COLLEGE

DEPARTMENT OF MILITARY ART

Fort Leavenworth, Kansas, July 10, 1913.

The Secretary,

Army Service Schools.

Sir:

The line officers who were instructors in this department at the close of the active work of the school year 1911-12, and who were assigned work for the year 1912-13, were:

Captain Oliver Edwards, Infantry
Captain R. H. McMaster, Field Artillery
Captain C. E. Stodter, Cavalry
Captain Berkeley Enochs, Infantry
Captain Stuart Heintzleman, Cavalry
Captain A. L. Conger, Infantry
Captain C. A. Trott, Infantry
Captain Laurence Halstead, Infantry
Captain T. B. Taylor, Cavalry

None of these officers were on duty here at the end of the school year, an entire change of instructors being made during the year.

Captain Heintzleman had applied to be relieved and his application was approved by authorities here on the condition that he be replaced by another officer; he was relieved just before the opening of the schools without being replaced. Captain Oliver Edwards was relieved without warning to me just before the opening of the schools. Captains Edwards and Heintzleman had been assigned a large part of the work for September and October for the reason that four of the other instructors were entirely new to their work and it was desired to give the new in-

structors two months for study and preparation at the beginning of their detail. The task of getting the work which had been assigned to Captains Edwards and Heintzleman efficiently done was one of unusual difficulty.

Although four of the other instructors were new to their work and required time for study and preparation: it was necessary to call on them for some of the work that had been assigned to Captains Edwards and Heintzleman: they were also detailed on a board for the examination of candidates for commis-I made a protest in writing against instructors in this department being detailed for any work except such as I assigned them; but my protest was not favorably acted on. The work of examining these candidates for commissions was very onerous: it covered matter entirely foreign to the subjects taught in this department, and seriously hampered these instructors in preparing for the work which I had assigned them in this department.

* * * * * * * *

Captains Fiske, Stodter, Conger, Trott, Halstead and Taylor were relieved in December in consequence of the passage of the Act of Congress limiting detached service. An application had been made to have these officers transferred to troops and companies stationed at this post, and the hope was entertained until the early part of December that this application would be favorably considered, since officers stationed at the post were employed as instructors here during the first fifteen years of the schools' existence.

* * * * * * * *

Captain Rhees Jackson, Infantry, was detailed as an instructor here for the purpose of teaching Spanish in the Signal School from September to December and acting as an instructor in the Department of Military Art from January to June. Accordingly I commenced to assign work to Captain Jackson in January, but I found that Captain Jackson had been directed by the assistant commandant to teach Spanish in the Staff College, a course which continues throughout the year. Captain Jackson did some valuable work as an instructor in the Department of Military Art, both in the Staff College and the School of the Line, but it was impossible for him to do the work assigned to him in the Department of Languages, mark papers of candidates for commissions and do any regular work in the Department of Military Art, so I soon ceased assigning work to him.

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The following instructors joined this department during the year: Major C. D. Moore, Infantry, September 14, 1912; Major H. G. Bishop, Field Artillery, October 11, 1912; Major H. A. Smith, Infantry, November 11, 1912; Captain W. K. Naylor, Infantry, December 26, 1912; Major N. F. McClure, Cavalry, February 1, 1913; Captain E. E. Haskell, Infantry, March 27, 1913.

It is not to be supposed that these officers were prepared to take up the work of instructors immediately on their arrival here; and the number of instructors present was at no time up to what has been considered the proper quota for this department heretofore.

Captain Naylor was ordered to Cincinnati, Ohio, for duty in the relief of flood sufferers in March and was absent about a month. I protested against his being sent away, but without effect.

I was continually occupied during the year in trying to obtain new instructors to replace those ordered away, but did not succeed at any time in bringing the number up to the minimum which I consider necessary for this department; and I was continually engaged in starting new instructors.

So far as I was able I endeavored to prevent hurtful changes and to protect instructors of this department form the imposition of work outside the department which interfered with their work in it.

The courses of instruction in the School of the Line and Staff College were essentially the same as those of the preceding year, previously reported on by my predecessor, Lieutenant Colonel J. F. Morrison; and these courses were completely and efficiently carried out in spite of the disadvantages enumerated above.

Among the factors which made success possible was the fact that the six instructors who were relieved in December (Captains Fiske, Stodter, Conger, Trott, Halstead and Taylor) all continued to assist me voluntarily after they had been relieved by orders from the War Department. It gives me pleasure to subscribe to the devoted loyalty of these officers, in the hope that it may be appreciated by those of their comrades throughout the service who are interested in the continued success of these As an instance in point, Captain Fiske, at schools. my request, after joining his regiment and while on duty with his company, made out and sent me six problems which I used as part of the practical course of instruction in the School of the Line; these problems were thought to be of such merit that they were afterwards printed in pamphlet form and will be used next year as a part of the theoretical course.

I was also fortunate in securing the detail on temporary duty for three months of Major S. H. Elliott, 12th Cavalry. This talented officer is well known by all who are interested in these schools through the efficient work which he performed here during the preceding four years; and I need only say that his courses of instruction were more complete and more interesting this year than before.

Captain C. D. Roberts, Infantry, a student officer of the Staff College, was detailed to conduct a series of nine conferences on historical research and one terrain exercise in the School of the Line in April and May, and this work was very efficiently performed.

During the past year four instructors of this department have applied to be relieved and three others have exchanged the detail here for other I have corresponded throughout the year details. with officers thought suitable for detail as instructors here and a number of them have requested me not to apply for them, as they did not desire the detail. A few years ago a detail as instructor in the Department of Military Art in these schools was regarded by many as the most desirable detail in the army. This is no longer the case, and, while it is true that the officers who are willing to accept this detail are often the ones best qualified to perform efficient service in it, the fact that many officers do not desire the detail hampers the selection of officers for this A few years ago a number of books were produced by instructors here, and these books are believed to have been of service to the army. observed that these schools are now barren in the production of books.

The work of the instructors of this department is continuous from the first of September till the last of June in both the Army Staff College and the Army School of the Line; in July and August these instructors are usually sent to maneuver camps or detailed as instructors of militia. Their work in the School of the Line and the Staff College is of such a nature as to require their best efforts throughout the year. It is not to be supposed that an officer, no matter how talented he may be, can instruct other officers of his own age in their profession in such a

manner as to gain their confidence and hold their attention without serious preparation. He cannot do justice to himself or to his class unless he is given adequate time for preparation.

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FARRAND SAYRE, Major, Cavalry, Senior Instructor.

(Asterisks indicate matter omitted from this report by direction of the War Department.)

THE ARMY STAFF COLLEGE DEPARTMENT OF LANGUAGES

Fort Leavenworth, Kansas, August 25, 1913.

The Secretary:

I have the honor to submit the following report of the work of this department for 1912-13:

The time allotted to this department was 151 half-days, but owing to the fact that the school closed early, only 143 lessons were held. Instruction was imparted by conference, recitation, practice in pronounciation, verb drill, and dictation. The conferences were at first of an hour and twenty-five minutes each, but owing to the operation of the detached service law, and consequent reduction of the number of instructors it became necessary to consolidate the sections and even for a time to cut down the length of the conferences to an hour each. This materially reduced the amount of instruction that could be given and interfered with the benefit to be derived from Ten members of the class were relieved the course. from duty at the Staff College, and the number of instructors was cut down from five to two. of these instructors was required to work in the Miltary Art Department, in addition to his work in languages, it proved extremely difficult to keep the work up to the proper standard.

The work started at the beginning of the academic year with Captain William Kelly, jr., 9th Cavalry as senior instructor, and Captains C. F. Martin, 3d Cavalry, and Rhees Jackson, 12th Infantry, and 1st Lieutenant Henry Hossfeld, 3d Infantry, instructors. Second Lieutenant Thom Catron, 23d Infantry, reported for duty on September 33, 1912. On Decem-

ber 15, 1912, Captains Kelly and Martin and Lieutenant Hossfeld were relieved from duty at the schools by the operation of the detached service law. On December 13, Major Charles Miller, 7th Infantry, was detailed by the commandant, General Potts, and assigned to this department, but was relieved on the 20th of the same month. He was again detailed on January 13, by War Department orders, in addition to his duties at the post of Fort Leavenworth, and on February 22, was again relieved to go with his regiment to the border. He has again been detailed and has been in charge of the department since August 20.

2. The Course in Spanish.

Instructors:

1st—Captain William Kelly, jr., 9th Cavalry

2d-2d Lieutenant Thom Catron, 23d Infantry

3d-Captain Rhees Jackson, Infantry

Text books:

"Practical Course in Spanish," Monsanto and Languellier

"The Spanish Verb," Traub

"El Castellano Actual," Roman y Salamero

"Practical Spanish," Part I, De Arteaga

The progress of all those who completed the course, eight in number, was satisfactory, several of them showing considerable talent. Captain Kelly taught the section until the arrival of Lieutenant Catron; Lieutenant Catron taught it until the departure of the instructors, relieved on account of excessive detached service, and Captain Jackson taught it the rest of the year, except while Major Miller was on duty at the schools during one short period when Lieutenant Catron taught all three languages.

3. The Course in German:

Instructors:

1st—Lieutenant Henry Hossfeld, 3d Infantry 2d—Major Charles Miller, 7th Infantry 3d—Lieutenant Thom Catron, 23d Infantry Text Books:

"Thomas's Practical German Grammar."

"Gluck Auf," by Muller and Wenckeback

"Thomas and Harvey's German Reader."

"Der Kleine Deutsche," by Kron

Lieut. Hossfeld taught this section up to the time of his relief from duty; Major Miller taught it while he was here, and Lieutenant Catron the rest of the time.

The progress of those students who completed the course, two in number, was satisfactory.

4. The Course in French.

Instructors:

1st—Captain C. F. Martin, 3d Cavalry 2d—Lieutenant Thom Catron, 23d Infantry

Text Books:

"The French Verb," Martin

"Elementary French," Aldrich & Foster

"The Second Year in French," Syms

"Le Petit Parisien," Cron

"The Third Year in French," Syms

"Advanced French Prose Composition," Francois

"French Conv. Lessons, I. C. S." (For reference and individual practice with phonograph.)

Captain Martin taught this section until his relief from duty here, and Lieutenant Catron the rest of the time.

The progress of those students who completed the course, four in number, was satisfactory, two of them showing considerable aptitude.

5. The allotment of time to the Language Department for the past year was 151 half days. It has been increased to 165 half days for the ensuing year. The extra time will be advantageous, as it can be used to impart considerable extra instruction, and to increase conversational ability.

Credit should be given to Lieutenant Catron for the work that he has done in this department. He has taught two, and at times all three languages, at the same time and deserves commendation for his conscientious and painstaking work.

CHARLES MILLER,
Major 7th Infantry, Senior Instructor.

THE ARMY SIGNAL SCHOOL DEPARTMENT OF LANGUAGES

Fort Leavenworth, Kansas, August 25, 1913.

The Secretary:

I have the honor to submit the following report of the work of this department, 1912-13:

1. Only Spanish was taught in the language course of this school. Sixty-four half days were allotted to the course. Length of conferences, one hour and twenty-five minutes each.

Number of students, nine.

The class was divided into two sections in order to give more individual instruction.

The instructor was Captain Rhees Jackson, Infantry.

Text-books—"A Practical Course in Spanish," Monsanto and Languellier.

"The Spanish Verb," Traub.

- "El Castellano Actual," edition of 1911, Román y Salamero.
- 2. The progress of the class was, as a whole, satisfactory, considering the shortness of the course. Satisfactory results cannot be obtained from a course of sixty-four lessons:

It is recommended:

- (a) That detail to the Signal School be made conditional upon a knowledge by applicant of the Spanish verbs, regular and irregular.
- (b) That the time allotted to this course be increased to 100 half days. While the importance and value of reasonable proficiency in a foreign language (Spanish in particular) to the signal officer

is fully appreciated, unless an improvement on the lines recommended can be effected, this department is forced to the conclusion that the time at present devoted to this study could be employed otherwise to better advantage for the service and the student officer.

CHARLES MILLER,
Major, 7th Infantry, Senior Instructor.

THE ARMY SERVICE SCHOOLS FORT LEAVENWORTH, KANSAS

June 25, 1913.

The Secretary:

I have the honor to submit a report on the Department of Law for the academic year 1912-13:

Forty-five (45) half days during the year were assigned to the School of the Line for the study of law.

The time was divided, broadly, into three periods during which the Elements of Law, Criminal Law, and the Law of Evidence were studied.

The course in the Elements of Law, to which eleven (11) half days were devoted, was somewhat modified from the course followed in previous years, in order to introduce three (3) lectures on Army Contracts and one (1) lecture each on Riot Duty and the Laws of War.

During the nine (9) half days devoted to Criminal Law the same course was followed as in the previous year, Clark's Criminal Law (2d edition) being the text book used.

Twenty-two (22) half days were devoted to the Law of Evidence.

Three (3) half days were allotted to practical exercises.

The text book used in the study of evidence was McKelvey on Evidence (2d edition). In some respects this book was not found entirely satisfactory and it is proposed to substitute for it during the next academic year Hughes on Evidence.

Twenty-nine (29) half days were allowed for the Staff Class course in law. A departure was made in the course, which of recent years has been con-

siderably shortened, and a series of lectures substituted for the study of General Birkhimer's work and of Magoon's Reports.

Twelve (12) lectures on International Law, having particular reference to the laws of war and to the modern doctrine of military occupation, were delivered, followed by four (4) lectures on Military Contracts, two (2) lectures on "The Army in Aid of the Civil Authorities," and eleven (11) lectures on Constitutional Law. The lectures on Army Contracts were given to the Staff Class, as the latter had not studied such contracts during its Line Class year.

The time for the Staff Class in law for the academic year 1913-14 has been further reduced and will consist of fifteen (15) half days only. It follows that the course must be reduced to twelve (12) lectures on international law, and three (3) lectures on the relation of the army to the civil authorities.

During the academic year lectures on the laws of war were delivered by this department to the Special Class for Field Officers and to the Field Service School for Medical Officers.

Every effort has been made to render the course in law eminently practical and to devote the very restricted time allowed to such instruction as will prepare officers for the understanding of such questions in law as may arise in their professional life. It is quite impossible to do more than this in the time allowed.

At the beginning of the course this department had the benefit of the assistance of Captain Sigerfoos, 5th Infantry. He, however, was forced in December, 1912, under the operation of recent legislation, to return to duty with his regiment. It is hoped that on his promotion he may be allowed to return to duty at the schools.

JNO. BIDDLE PORTER,
Lieutenant Colonel, Judge Advocate,
Senior Instructor.

THE ARMY SERVICE SCHOOLS FORT LEAVENWORTH, KANSAS

June 27, 1913.

From: The Director, Field Service School for Medical Officers.

To: The Commandant, Army Service Schools. Subject: Work completed during school year 1912-13.

I was detailed as director of this school and also instructor in the Department of Care of Troops August 15, 1912, and immediately took up the duties of the office. In this department I have given instruction to five different classes which will be reported on separately:

ARMY SCHOOL OF THE LINE

The sanitary work in this school has been coördinated with that of the Department of Military Art in the management of military organizations.

Field hygiene and the employment of the medical department in the field have received the most attention.

Lectures were given as follows:

- 1. Organization of the Sanitary Service in War.
- 2. Sanitary Service With the Regiment.
- 3. The Ambulance Company and Dressing Station.
- 4. The Field Hospital.
- 5-6. The Sanitary Service of the Line of Communications.
 - 7. The March in Campaign.
 - 8. Camp Sites and Camps.
 - 9. Camp Sanitation.
 - 10. Water Supplies in the Field.
 - 11. The Ration in the Field.
- 12-13. Infectious Diseases of Camps.

There was also one problem in sanitary tactics and one terrain exercise was given the class.

The class has paid the greatest attention to this work throughout the course and the majority retain a good working knowledge of the subjects covered during the year.

THE ARMY STAFF COLLEGE

The work of sanitary instruction with this class comprised a series of lectures and conferences on the larger questions of army sanitation and hygiene and consideration of the duties of the principal staff officers of the medical department of a division in the field.

The schedule of lectures and conferences was as follows:

- 1. Selection of Soldiers.
- Exercise, Training and Work in Relation to the Military Service.
- 3. Water and Food Supply in Garrison.
- 4. Military Equipment and Clothing with Special Consideration of Footwear.
- 5. Barrack Construction and Ventilation.
- 6. The Principles of Plumbing and Disposal of Sewage.
- 7. The Habits of the Soldier.
- 8. Climatology in Relation to Military Health and Efficiency.
- 9. Sanitary Inspection in the Military Service.
- The Prevention of Camp Diseases in Newly Raised Commands.
- The Influence of Military Epidemics Upon the Geographical Expansion, Political History and Military Policy of the United States.
- 12. The Civil Sanitary Function of the Army Medical Department in Territory Under Military Control.
- Army Medical Statistics in Relation to Epidemiology and Geography of Diseases and Their Bearing on Military Purposes.
- Military Absenteeism in War with Special Reference to the Part Played by the Medical Department Therein.
- 15. The Chief Surgeon.
- 16. The Sanitary Service of the Line of Communications.

One lecture not mentioned above was omitted on account of the unavoidable absence of the lecturer.

In addition to this the class was given three problems covering the duties of the medical department in campaign.

From the interest shown and consideration of the solutions of problems this class has a very complete knowledge of the work and the position of the military department in the military hierarchy.

SPECIAL CLASS FOR FIELD OFFICERS

The schedule carried out by the department for this class, though not very elaborate on account of the limitations presented by the time allowed, at least gave these officers working knowledge of sanitary service in campaign.

The schedule followed was as follows:

- 1. Medical Department Organization in War.
- 2. Regimental Aid-The Slightly Wounded Station.
- 3. Dressing Stations.
- 4. Field Hospitals-Medical Supplies.
- 5. Sanitary Service Line of Communications.
- 6. Sanitary Service in War, with Map Problem.

MEDICAL OFFICER'S CORRESPONDENCE SCHOOL

This was the third year in an outlined four-year'd course covering the subject of sanitary tactics.

Thirty officers were detailed for the course and twenty-six completed the work outlined. The remaining four were excused on account of sickness and the exigencies of service.

Six problems were sent out covering the following subjects:

- 1. Sanitary Service in Attack.
- 2. Disposal of Sick in Bivouac in the Presence of the Enemy.
 - 3. Concentration.
 - 4. Location of Sanitary Units, Line of Communications

and Routes of Evacuation for a Field Army.

- The Handling of Wounded by the Lines of Communications of a Division.
- 6. Sanitary Service of a Fortified Position.

The solutions of the problems presented this year were as a whole superior to those of last year showing a much more thorough knowledge of the subject and an appreciation of its importance.

This course is in my opinion performing a very valuable service for the medical department of the army.

THE ARMY FIELD SERVICE SCHOOL FOR MEDICAL OFFICERS

This class this year consisted of seven regular officers, two of whom did not report and six militia medical officers, (one from each of the following states, Wisconsin, Minnesota, Alabama, Idaho, Utah and New Mexico).

All of these officers took a serious interest in the course and their work was extremly satisfactory.

The course this year was increased from six to eight weeks and this extra time permitted an extension of the course to include several important subjects particularly in relation to the sanitary service with a field army and also a staff ride of four days.

The staff ride was the first ever arranged in this country for medical officers alone, and was most successful in every way and the instruction obtained was very important.

The course outlined consisted of the following exercises:

- 13 conferences on the sanitary service in campaign.
- 14 conferences on Military Art.
- 3 conferences on the laws of war.
- 12 half days on sketching and map reading.
 - 4 Map maneuvers.
 - 8 Field problems.

- 8 Map problems.
- 7 Terrain exercises.
- 1 Staff Ride.

In connection with the course this year I wish to express my thanks to the instructors in the different departments of this school for their cheerful coöperation with me in the effort to make the work a success.

In conclusion I would state that the close of the year finds this school on a firm foundation and rapidly becoming recognized as an important integral part in the military education of the Army.

W. N. BISPHAM, Major, Medical Corps.

THE ARMY SIGNAL SCHOOL 1912-13

To the Secretary:

I submit the following report for the school year of 1912-13:

The following officers were regularly assigned to duty with the Signal School by proper authority:

Major L. D. Wildman, Director (Special Orders No. 139, W. D., dated June 13, 1912), reported for duty from sick report January 23, 1913. On duty for the remainder of the year.

Captain A. S. Cowan, Acting Director from September 5, 1912, to February 26, 1913. (Reported for duty in accordance with paragraph 14, Special Orders No. 209, W. D., dated September 5, 1912, and relieved from duty at the Army Signal School, February 26, 1913, per paragraph 2, Special Orders No 10, Army Service Schools, February 26, 1913.)

Captain Parker Hitt, Signal Corps, Instructor (paragraph 15, Special Orders No. 139, dated June 13, 1912.)

1st Lieut. Joseph O. Mauborgne, 3d Infantry, Instructor from previous year, relieved December 15, 1912, per paragraph 20, Special Orders No. 275 W. D., dated November 22, 1912.

2d Lieut. Edmund R. Andrews, 17th Infantry, Instructor (reported for duty January 17, 1913, per paragraph 16, Special Orders No. 8, W. D., dated January 10, 1913.)

Special instruction in meter testing and post electric light equipment was conducted by Mr. Junior Parrish, post electrician, as special instructor for this purpose.

The enlisted personnel remains the same, with the following exception:

Sergeant John C. DePue, Signal Corps, discharged May 17, 1913.

 $1\mathrm{st}$ Class Sergeant Jacob R. Shettel, Signal Corps, reported vice Sergeant DePue.

DEPARTMENT OF LANGUAGES

All student officers in the Signal School were in-

structed in Spanish for sixty-four half days. As many of these officers had no preliminary instruction in Spanish, it was found impossible for the instructor to give the class sufficient proficiency in either speaking or reading Spanish, to justify the continuance of the course as it stands. It was recommended to the Academic Board that the time allotted to the Department of Modern Languages be increased or abandoned altogether.

The director requested the Academic Board to recommend that Spanish be abandoned altogether, for the reason that the Signal School is primarily a technical school for the education of officers in order to make them available for a detail of four years in the Signal Corps with sufficient preliminary knowledge of electricity and the work of the Signal Corps to enable them to perform successfully the duties of a signal officer. Sixty-four half days devoted to Spanish can scarcely give the student officer an adequate knowledge of the language, but that time, if devoted to radio telegraphy or some special branch of the Signal Corps, would be of immense value.

The Academic Board unanimously recommended that Spanish be abandoned and forwarded its conclusions to Washington. The director again urges that steps be taken to transfer the sixty-four half days now devoted to Spanish to the time allotted to the Signal Corps work.

DEPARTMENT OF ENGINEERING

Instruction in topography was given to the student officers of the Signal School for twenty half-days. This time was devoted to the elements of military sketching in accordance with the methods taught in the Army School of the Line. It is believed that military sketching might better be taught at some other place than the Army Signal School, as the time

devoted to this is taken away from the time that should be devoted to purely technical instruction in the Signal School. While every officer of the army should understand military sketching, as well as Spanish, it does not seem that the Army Signal School is the proper place to acquire either of them. It is, therefore, recommended that the time now devoted to topography be transferred to the Signal School.

Student Officers

The following student officers were graduated on June 16, 1913:

First Lieutenant Frederick F. Black, Signal Corps First Lieutenant Vernon W. Boller, 2d Infantry First Lieutenant Webster A. Capron, 6th Field Artillery First Lieutenant Clarence A. Dougherty, Signal Corps First Lieutenant Marvin E. Malloy, 29th Infantry First Lieutenant Forrest E. Overholser, 5th Infantry First Lieutenant James H. Van Horn, Signal Corps First Lieutenant George F. Waugh, 27th Infantry

First Lieutenant Jaime Nadal, Porto Rico Regiment, detailed to enter the Signal School in accordance with paragraph 30, Special Orders No. 183, W. D., dated August 5, 1912, was relieved from duty as a student officer December 15, 1912, in accordance with paragraph 20, Special Orders No. 275, W. D., dated November 22, 1912.

Captain Edwin A. Hickman, Signal Corps, was detailed for a special course in Signal Engineering at the Signal School pursuant to paragraph 20, Special Order No. 80, W. D., dated April 7, 1913. He remained until June 23, 1913, being verbally assigned during the last two weeks of that period to Company A, Signal Corps.

Field Company D, attached to the Signal School for instruction purposes was relieved from duty on February 22, 1913. The following officers were on duty with it:

Captain A. S. Cowan, Signal Corps
Captain George E. Kumpe, Signal Corps
First Lieutenant Irving M. Madison, Signal Corps
As the schedule for the year contemplated in-

struction with the field company in field work and problems, the director requested that Field Company A, from Fort Omaha, proceed to Fort Leavenworth for duty. It arrived in accordance with paragraph 2, Special Orders No. 35, Central Department, dated April 28, 1912. The following officers were on duty with Field Company A:

Captain Holland Rubottom, Signal Corps First Lieutenant Wilber A. Blain, Signal Corps

and

Captain William M. Fasset, Signal Corps Captain Edwin A. Hickman, Signal Corps were attached for duty and instruction.

DEPARTMENT OF SIGNAL ENGINEERING

This course included instruction in:

- (a) Electricity
- (b) Units and Electrical Measurements
- (c) Signal Engineering
- (d) Batteries, primary and secondary
- (e) Submarine Cables
- (f) Telegraphy
- (g) Radio Telegraphy
- (h) Telephony
- (i) Visual Signaling
- (j) Military Lines of Information
- (k) Gas and Oil Engines
- (1) Photography
- (m) Map Reproduction Under Field Conditions—Map Reading and Sketching.
- (n) Practical Operation and Repair of Signal Corps Instruments
- (o) Line Construction
- (p) Codes and Ciphers
- (q) Signal Corps Manuals
- (r) Logistics as Applied to Signal Troops

Theoretical—The method of instruction in the technical work of the school is a combination of the conference and quiz methods, supplemented by frequent written problems and lectures. The director now believes that much time may be saved in the

coming year by adding to the conference and quiz on each day's work a problem involving the use of instruments and apparatus, and the course has been so changed that this method will be followed if found satisfactory by trial. This will enable the class as a whole to solve the simpler problems in electrical measurements which have heretofore been carried on in the laboratory by each individual. As notebooks on these problems will be required, each student officer will therefore retain the complete diagram of the instruments and connections, and will have worked out several problems independently, the data being furnished by the instructor from actual measurements made in the presence of the class as a whole. and verified on the instruments by each individual. While this will considerably increase the time occupied by the class in theoretical instruction, it will enable the student officers as individuals to devote much more time in the laboratory to special work on Signal Corps instruments and practical measurements of faults in cables and telegraph lines.

The standard text-books used during the year were as follows:

Principles of Wireless Telegraphy-Pierce Lessons in Practical Electricity—Swoope Primary Batteries-I. C. S. Pamphlet Storage Batteries—I. C. S. Pamphlet Management of Military Telegraph Lines-Signal Corps Manual No. 2 Electrical Instruments and Telephones of the U.S. Signal Corps - Signal Corps Manual No. 3 Visual Signaling-Signal Corps Manual Property and Disbursing Regulations of the U.S. Signal Corps—Signal Corps Manual No. 7 Pamphlet on Static Electricity Principles of Gas Engines-I. C. S. Pamphlet Carburetters—I. C. S. Pamphlet Electric Ignition Devices-I. C. S. Pamphlet Troubles and Remedies-I. C. S. Pamphlet Alternating Currents-I. C. S. Pamphlets

Alternators—I. C. S. Pamphlets Alternating Current Apparatus—I. C. S. Pamphlets

In the course in theoretical instruction several problems necessitating research have been included in which the student officers were required to study carefully the organization and equipment of the different Signal Corps units as laid down in the various orders and manuals, as well as to consider the subject of transportation and the assignment of special duties to signal troops accompanying armies in the field. In these problems the general subject matter is handed to the student officer and he is required to do the research work in time not allotted to other studies.

Map problems in which the reel carts of the field companies are represented by filled spools representing to scale the amount of wire carried on the field carts, were introduced during this year, and will be carried on to a much greater extent in the coming year. These problems are considered to be of special value in that they involve the use of written orders in accordance with the forms required by the School of the Line, and necessitate a general study of the tactical situations presented.

Practical—In visual signaling each student officer, before being considered proficient, was required to actually send and receive in the general service code five words per minute with the flag, the heliograph, and the acetylene lantern. In the past year it was found impossible for many reasons to give the student officers much practice in long distance work. The course has been arranged for next year, however, with a view to giving several days to this subject, during which the student officers will represent two columns marching at divergent directions, and will be required to keep these columns in touch with visual signals. This problem will involve the more

difficult situations with which student officers as a rule have little practice.

In telegraphy it was found best to increase the standard of proficiency and each graduate of this year's class has satisfactorily sent and received fifteen words per minute using the field buzzer, with both the Continental and Morse codes. In all the practice work of the students, both visual and telegraphic, sending has been from message forms filed with the student officer, and the office marks, count, numerals, etc., were required to be checked and entered on the blanks as in ordinary commercial practice.

In the laboratory, the problems were made as practical as possible, and as soon as the student officers had become familiar with the various instruments of precision with which they were required to work, they were thrown upon their own responsibility, the instructor being there simply for the purpose of giving such assistance as might be necessary in order that the student officer might not waste too much time by wrong methods. In each problem it was assumed that a report was to be made concerning the subject in hand, which was to be written up and handed to the instructor. These reports, if correct, were handed to the student for file in his own notebook, and if incorrect, were returned for further work. In preparing these reports and working the problems, student officers were not only permitted. but encouraged, to consult the reference books in the library of the laboratory, and the previous notes in their own notebooks. It is not considered desirable for signal officers to memorize electrical formulae.

The technical equipment of the laboratory is excellent and as complete as can be desired. The following apparatus has been received since January 1, 1913:

- 1 Duddell Thermo-Galvanometer, with 4, 100, 1000, ohm heaters.
- 1 Type 1-P-76 Receiving set, 1913 Model, W. S. A. Co.
- 1 Motor-generator set, ½ k. w., Telephone
- 1 Automatic transmitter, complete with one vibrophone.
- 1 Chuck, Sweetland, comb., 6", 4 jaws, reversible, fitted to 14" American tool-room lathe.

Fabricated at Army Signal School Laboratory:

- 1 Anderson-Fleming bridge.
- 1 Local battery Switchboard, two-line.

Furnished by Army Service Schools:

- 12 k. w. Rotary-quenched spark radio transmitting set.
- 1 Milling machine
- 1 Drill press.
- 1 Grinder, drill.

PHOTOGRAPHY

The instruction in photography was entirely practical, the student officers being given cameras with both films and plates, and required to develop, enlarge and copy. After the first instruction, this work was entirely independent until the student officer obtained sufficient practice to do satisfactory work.

PRACTICAL FIELD WORK

The latter part of the course for this year as scheduled contained a number of days of work with the field company. As Company D was removed to Texas, Company A from Fort Omaha was substituted. Less practice than usual, however, was given the student officers on account of the fact that graduation was set forward to June 16, instead of July 1. This shortening of the course made it also necessary to omit the subject of aviation altogether. As there appears to be no probability of Company D being returned to the school in the immediate future, the director has requested that Company A be assigned for instruction purposes until Company D actually returns. Too much stress cannot be laid upon the ne-

cessity for the field company in practical work and for demonstrations in connection with the map problems to be carried on in the coming year. The director, therefore, urges the necessity for some action to gain this end before September.

INSTRUCTORS

The instruction in theoretical work for the past year has been in charge of Captain Hitt. Lieutenant Andrews has been in charge of the laboratory work. In both of these departments the instructors have worked hard, faithfully, and continuously.

The contemplated alteration of the course for next year (along more practical lines requiring more work by the instructors) has made it necessary to ask to have an additional instructor detailed. To this end, application has been made for the detail of First Lieutenant F. E. Overholser, 5th Infantry. With Lieutenant Overholser added to the teaching staff, it is believed that an increase in efficiency may be obtained from the fact that he has had practical experience in electricity along lines with which neither the present director nor the instructors are familiar.

Two criticisms have always been made of the graduates of the Signal School. First, they are not competent operators when detailed with field companies; second, that they are deficient in initiative It is absolutely impossible to and self-confidence. put eleven men into one class in telegraphy under one instructor for practice and have that instruction Within a short time the better men will have to go too slowly or the poorer men will not be This is one of the reasons for an able to keep up. additional instructor. The subject of initiative and self-reliance is a hard one, but it is believed that the system as outlined for next year will tend to better development, for each man will be pushed as an individual along the lines in which he shows the greatest aptitude. This also necessitates individual instruction, and, therefore, more instructors. It is urgently recommended that Lieutenant Overholser be detailed for the coming year.

PREPARATION

The school has always labored under the handicap of being obliged to teach a number of men who have had little or no preparation for the school, but who are, of necessity, placed in the same classes with men who are already familiar with a part of the work. It is believed that it would be advantageous in the future to select officers for the coming year as far back as January. This would enable the officers themselves to study for nine months. In this connection it is believed that a correspondence school for this preliminary work could be carried on in connection with the regular school. It is therefore recommended that details for the Signal School be made in January instead of June, as heretofore.

RADIO STATION

The radio station attached to the Signal School has operated continuously with as satisfactory results as could be expected. This station and the station at Fort Omaha were the only means of communication from Omaha to the outside world for a considerable period after the tornado. The stations, however, were not satisfactory in this respect, and recommendations have been made for an increase in power, as well as a different type.

The following named enlisted men were assigned to duty as students at the radio station under Sergeant Raymond A. Grantham: First Class Private Charles G. Clark First Class Private J. W. Boone Private J. E. Gilroy Private J. E. Pegues

These men, with the exception of Private Clark, left this post for Alaskan stations. Private Clark was retained and placed in charge of the radio station.

The following enlisted men of the Signal Corps reported as students on the dates given:

Corporal J. C. Rowan, May 25 First Class Private Samuel F. Meece, May 21 Private Myron Rippberger, May 29 Private M. M. Barrere, May 21

They have been placed directly under the instructor in laboratory work for practice instead of being under the direct supervision of the senior operator at the station. It is believed that better results may be obtained by this method.

Plans have been submitted from the director for an additional building at the radio station to accommodate a new set of instruments of improved type actuated by an independent source of power.

AVIATION

The single aeroplane attached to the school has not been used on account of the fact that no aviator was available. It was, however, of slight service in demonstrating to the student officers the particular type of internal explosion engine with which it is equipped. It is recommended that, in view of the unfavorable location of Fort Leavenworth in regard to climatic conditions, no attempt be made to keep this aeroplane and hangar for use as a part of the instruction apparatus of the school. As aviation is an entirely separate branch of the Signal Corps work and cannot be taught through text-books, the

director considers it advisable to make no attempt at teaching even the principles at the Signal School. It will, therefore, be omitted from the next year's course unless otherwise directed. One lecture, however, will be delivered giving a general view of the state of the art to as late a date as possible. It is intended that this lecture shall be printed and contain as an appendix as much scientific data as can be obtained in order that it may form a text for reference on the general subject. This appendix will also contain data concerning the chemistry, manufacture, storage, and use of hydrogen in connection with balloon operation.

RADIO EXAMINER

In accordance with the recent law in regard to licenses for radio operators, the director of the Signal School has been appointed examining officer for radio licenses in this district for both commercial and amateur grades. The examinations for licenses are held at Fort Leavenworth, and as a large number of the applicants are civilians, it has been found necessary to hold the examinations quite frequently. This has necessitated extra labor on the part of the instructors not contemplated when the school was established. While there is no objection to this, it would seem to be another reason for an extra instructor.

The number of licenses issued since the director was appointed is as follows:

Commercial First-grade	3
Commerical Second-grade	3
Amateur First-grade	10
Amateur Second-grade	4

A number of applicants have failed and no licenses were issued. While the director has no supervision over radio stations themselves, offending

amateurs have been listed and attempts made to locate the disturbing stations. In a number of cases the owners and operators of these stations have been found and warning given. Lieutenant Andrews and Lieutenant Mauborgne have qualified and obtained first-grade commercial licenses during the year.

L. D. WILDMAN,
Major, Signal Corps, Director.